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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/819,984

03/29/2001

Jong-ki Han

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3707

21171

7590

03/04/2005

STAAS & HALSEY LLP

SUITE 700

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EXAMINER

TUCKER, WESLEY J

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/819,984

Applicant(s)

HAN, JONG-KI

Examiner

Wes Tucker

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-10, 12-24 and 26-30 is/are allowed.
- 6) ☒ Claim(s) 1 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Request for Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 31, 2005 has been entered.

Response to Amendments and Arguments

1. Applicant's response to the last Office Action, filed January 31, 2005, has been entered and made of record.
2. Applicant has amended claims 1, 2, 11, 25, 26, and 27. Claims 1-30 are pending.
3. Applicant's arguments have been fully considered and are not persuasive for at least the following reasons:
4. With regard to the rejection of claims 1 and 11 under 35 U.S.C. 102(e), Applicant argues that the reference of U.S. Patent 6,272,261 to Matsuoka does not disclose the

limitations of claims 1 and 11. Applicants arguments are based on the fact that Matsuoka discloses further dividing the image once it has already been divided into further divided sub-blocks and using the further divided image to calculate parameters for cubic convolution. However Examiner points out that the configuration of Matsuoka's invention still reads on the newly amended claims 1 and 11. The interpolation coefficients of Matsuoka are still considered to be determined "in units of the divided subblocks" and the cubic convolution interpolation is still interpreted as being performed "on the original image data that is transmitted from the image signal divider." Therefore the reference of Matsuoka is interpreted to read on the language of the claims as written and as amended and the rejection of claims 1 and 11 are maintained.

5. With regard to newly amended claims 25 and 26, the remarks made by applicant are persuasive and the claims 25 and 26 are deemed allowable.

6. Claims 2-9, 21, 23, 24 and 27-30 were previously objected to as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening. Claims 2 and 27 have been amended and are deemed allowable along with their respective dependent claims.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. Claims 1, 11, 25, and 26 rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,272,261 to Matsuoka.

8. With regard to claim 1, Matsuoka discloses a cubic convolution interpolating apparatus comprising an image signal divider dividing an image signal into a plurality of subblocks as original image data (Fig.1, element 1), and a generating unit generating parameters which determine cubic convolution interpolation coefficients in units of the divided subblocks, and performing cubic convolution interpolation on the original image data that is transmitted from the image signal divider (column 2, lines 23-30, column 8, lines 45-50). The parameters or image feature quantities take the form of frequency-converted coefficients and are extracted from the frequency conversion or generating unit. These image feature coefficients are then used to calculate the interpolation coefficients by calculating the mean coefficients, which are used in selecting the interpolation to be executed (Fig.1, elements 1-5). A filter using cubic convolution interpolation is provided (column 8, lines 45-50).

9. With regard to claim 11, the discussion of claim 1 applies. Matsuoka discloses the method of claim 11 with regard to the apparatus of claim 1.

Allowable Subject Matter

12. Claims 2-10, 12-24 and 26-30 are allowable.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wes Tucker whose telephone number is 703-305-6700. The examiner can normally be reached on 9AM-5PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703)308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Wes Tucker
4-20-2004


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